

What is claimed is:

SUB A1 } 1. A compound 8 to 50 nucleobases in length targeted to a nucleic acid molecule encoding dual specific phosphatase 5, wherein said compound specifically hybridizes with and inhibits the expression of dual specific phosphatase 5.

2. The compound of claim 1 which is an antisense oligonucleotide.

3. The compound of claim 2 wherein the antisense oligonucleotide has a sequence comprising SEQ ID NO: 25, 29, 32, 36, 37, 38, 40, 41, 42, 45, 50, 51, 52, 53, 56, 57, 61, 63, 64, 65, 66, 68, 71, 72, 73, 74, 75, 77, 79, 80, 81, 83, 84, 85, 87 or 88.

4. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

5. The compound of claim 4 wherein the modified internucleoside linkage is a phosphorothioate linkage.

6. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

7. The compound of claim 6 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.

8. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

9. The compound of claim 8 wherein the modified nucleobase is a 5-methylcytosine.

10. The compound of claim 2 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

SUB A2 } 11. A compound 8 to 50 nucleobases in length which specifically hybridizes with at least an 8-nucleobase portion

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of an active site on a nucleic acid molecule encoding dual specific phosphatase 5.

12. A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

13. The composition of claim 12 further comprising a colloidal dispersion system.

14. The composition of claim 12 wherein the compound is an antisense oligonucleotide.

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15. A method of inhibiting the expression of dual specific phosphatase 5 in cells or tissues comprising contacting said cells or tissues with the compound of claim 1 so that expression of dual specific phosphatase 5 is inhibited.

16. A method of treating an animal having a disease or condition associated with dual specific phosphatase 5 comprising administering to said animal a therapeutically or prophylactically effective amount of the compound of claim 1 so that expression of dual specific phosphatase 5 is inhibited.

17. The method of claim 16 wherein the disease or condition is a hyperproliferative disorder.

18. The method of claim 16 wherein the disease or condition is a developmental disorder.

19. The method of claim 16 wherein the disease or condition is an inflammatory disease.

20. The method of claim 16 wherein the disease or condition arises from aberrant apoptosis.